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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/773,234

02/09/2004

Takeo Kagami

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08/29/2006

OLIFF & BERRIDGE, PLC

P.O. BOX 19928

ALEXANDRIA, VA 22320

EXAMINER

NGUYEN, TAI V

ART UNIT

PAPER NUMBER

3729

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/773,234

Applicant(s)

KAGAMI ET AL.

Examiner

Tai Van Nguyen

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 7-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6 is/are rejected.
- 7) ☒ Claim(s) 4-5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/9/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicants' election Group I, Species A (claims 1-6) with traverse in the reply filed on 7/7/2006 is noted asserting that there is no serious burden on the examiner to examine all claims. The traverse has been considered but not persuasive because reasons proffered do not appear germane to the propriety of a requirement for election of species (see MPEP section 808.01(a)). Applicants are not entitled to examination of multiple invention in one application because examination of the dependent invention i.e. Species B-D herein would present a serious burden to the examiner such as search are not coextensive and the art is quite prolific. Therefore, the requirement is repeated and made FINAL.

Further, Applicants contend that claims 1-11 are readable on Species A. Upon further review Species A. It's clearly that only claims 1-6 directed to an elected Species A, and reasons for the difference distinction species are indicated in paragraph 3 of the previous Action.

2. Claims 7-40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 7/7/2006.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
4. The following title is suggested: METHOD FOR FORMING A RESIST PATTERN OF MAGNETIC DEVICE.
6. The abstract of the disclosure should be revised to reflect the method of invention. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamijima (US 6,537,732) in view of Hasegawa (US 6,587,316).

As applied to claim 1, Kamijima discloses forming method comprising the steps of: forming a resist pattern (10, Fig. 7) for lift-off on a first film a composed of one or more layers deposited on one surface side of a base (1); patterning the first film (14) by dry etching said first film using the resist pattern (10) for lift-off as a mask (column 9, lines 1-50); depositing a second film (6) composed of one or more layers on the one surface side of the base after the step of patterning with presence of the resist pattern

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for lift-off on the first film (12); removing the resist pattern for lift-off to remove a portion of the second film on the resist pattern for lift-off (see the discussion at column 9, lines 16-19); and etching the one surface side of the base after the step of removing, the step of etching including dry-etching the one surface side of the base (column 9, lines 1-65+). However, Kamijima does not disclose the using of etching particles with a main incident angle to the one surface side of the base set for about of 60° to 90° relative to a normal direction of the one surface of the base. Hasegawa teaches that (see column 37, lines 17-23) which discusses about the etching particles to the one surface side of the base for about of 60° to 90° relative to a normal direction of the one surface of the base. Therefore, it would have been obvious to one of ordinary skill in the art at this time the invention was made to employ the Hasegawa teaching of user etching particles as describe above an to the invention of Hasegawa to improved the magnetic head.

As applied to claim 2, Hasegawa discloses the dry etching in the step of etching is ion beam etching using a simple gas or a mixed gas composed of one Ar (column 37, lines 3-9). It would have been obvious to one of ordinary skill in the art at this time the invention was made to have modified the method of Kamijima by including use etching particles, as taught by Hasegawa, to positively provide a thin film magnetic head having a high regeneration output of magnetic information while having a low incidence of side reading (column 8, lines 25-28).

As applied to claim 3, Kamijima discloses the resist pattern for lift-off has a shape at cross section including an undercut (3, Fig. 3).

As applied to claim 6, Kamijima discloses the first film includes metal layer positioned furthest away from the base (column 12, lines 20-32).

Allowable Subject Matter

9. Claims 4-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tai Van Nguyen whose telephone number is 571-272-4567. The examiner can normally be reached on M-F (7:30 A.M - 4:30 P.M).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TN.
August 23, 2006



MINH TRINH
PRIMARY EXAMINER